



ETHNOMEDICAL ASPECT OF BRUHATA GOKSHURA (*Pedaliium murex* Linn.): A DETAIL REVIEW

Dr. Raju Zinzala¹, Dr. Dharmendra Jani²

¹ Second Year P.G. Scholar, Upgraded P.G. Department of Dravyaguna, Government Ayurved College, Vadodara, Gujarat, India

² Associate Professor, Upgraded P.G. Department of Dravyaguna, Government Ayurved College, Vadodara, Gujarat, India

ABSTRACT

Background: Ethnomedicine generally refers to the study of traditional medicine practiced by different ethnic groups for the prevention and treatment of disease. *Bruhata Gokshura* (*Pedaliium murex* Linn.), a plant that belongs to the Pedaliaceae family. Traditionally *Bruhata Gokshura* is used as a medicine for various diseases in India. **Material & Method:** Available books were used to gather information about *Bruhata Gokshura*. This review also referenced online articles and websites. **Observation & Result:** Citing various books and the articles add detail to *Bruhata Gokshura*'s wide range of treatments. **Discussion:** *Bruhata Gokshura* has wide range of therapeutic application such as in Urinary disturbance (*Mutrakrichha*), Ashmari, *Vandhyatva*, *Shukrala*, *Kasa*, *Shwasa*, *Udara*, *Atisara*, *Pravahika*, *Shwetapradara*, Diabetes, venereal diseases like Gonorrhea, etc. But it has remained clinically very less explored. **Conclusion:** Based on this current review study, it can be concluded that more such drugs used by tribal groups can be studied and can be beneficial to other people if scientifically proven.

KEYWORDS: Ethnomedicine, *Bruhata Gokshura* (*Pedaliium murex* Linn.), Therapeutics

INTRODUCTION

Humans have a long history of using plants to meet their daily needs. Plants are used as medicine, food, animal feed and building material for houses. The use of medicinal plants and herbs for therapeutic purposes is a worldwide practice and almost all countries have benefited from their useful medicinal and therapeutic agents. Herbal medicines play a special role in health systems from ancient times to the present day. India has a rich tradition of plant-based knowledge on health care. A large number of plants, plant extracts, decoctions or pastes are equally used by tribals and folklore traditions in India for treatment of cuts and wounds.¹ Many tribal groups have been using several plant or animal products for medicinal preparations and these medicines are known as ethnomedicines.² Folk medicine can be broadly defined as plants used by people as medicine, but these uses could more accurately be called as ethnobotanical medicine.³ Our country has a huge emporium of ethnobotanical and folklore. Indigenous peoples have their own special culture, religious rituals, dietary habits and rich knowledge of traditional medicine.⁴ They had knowledge of various plants, but these were not documented. It spreads from person to person. So, it is necessary to collect information about those plants that are undocumented and used by the tribes. When information about these plants is collected and scientifically proven, it can be documented and can be useful to other people. It is also mentioned in *Charaka Samhita* that those who dwell in a forest, who are shepherds are endowed with the knowledge of plants.⁵

According to WHO, around 80% of the world's population is estimated to use traditional medicine.⁶ So here in this present paper *Bruhata Gokshura* is selected for the review of its

traditional uses. *Bruhata Gokshura* has been used from the ages for as a natural source of Aphrodisiac activity. But it has broad therapeutic values too.

Botanical name: *Pedaliium murex* Linn.

Family: Pedaliaceae

MATERIALS:

Books, online articles and webpages were referred for gathering the data regarding the traditional use of *Bruhata Gokshura*. References of *Bruhata Gokshura* are available from the books mentioned in the below table.

Sr. No.	Name of the book	Author
1.	Wild medicinal plants	M.P. Singh
2.	Ethnomedicinal Plants of India ⁷	P.C. Trivedi
3.	Indigenous ethnomedicinal plants ⁸	P.C. Trivedi
4.	Herbal folk medicines	Sampat Nehra

METHODS:

All the data regarding *Bruhata Gokshura* was gathered from the above-mentioned books and online articles. Then it is systematically categorized, arranged and according to it the observations and results are given below in the table.

OBSERVATIONS & RESULT:

Plant part	Application with indication
Whole Plant	➤ 1-2 g dried leaves of <i>Acacia nilotica</i> , 1 g <i>P. murex</i> (<i>Bada Gokshara</i>) and <i>kalmishora</i> in small amount crushed and taken with water before going to bed can cure urinary problem. ⁹

	<ul style="list-style-type: none"> ➤ The whole plant used to cure urinary calculi and renal troubles by village folk of Rayalseema.¹⁰ ➤ In district of Haridwar and Uttarakhand a local people's have been using whole plant of <i>P. murex</i> as remedy to cure stomach-aches, headache, diarrhoea, ➤ dysentery, cough and cold, intestinal infections etc.^{11,12} ➤ The twig of the plant is dipped in water 7-10 times and then taken orally as refrigerant and to cure dysentery.¹³ ➤ The tribal community of Southern Rajasthan use the whole plant to cure sexual diseases, and the Saperas community use it to cure sexual disorders and male fertility disorders.¹⁴ ➤ It is also used in treating of various urogenital systems like discontinuance of urine, in waste places spermatorrhoea, nocturnal emission, impotency and tonic.¹⁵ ➤ Plant crushed with root of <i>Chlorophytum</i> are made into laddus and are given to women for leucorrhoea.¹⁶
Fruit	<ul style="list-style-type: none"> ➤ Two spoon's fruits powder of <i>P. murex</i> mixed with <i>Cleome viscosa</i> L. leaf juice, given for seven days before going to bed, is used to enhance fertility and other female reproductive disorder.¹⁷ ➤ Decoction of the fruits is used for continuance of urine and other disorders of urinary system.¹⁸ ➤ In GIT disorder the fruits are powdered with roots of <i>Capparis sepiaria</i>, <i>Bombax ceiba</i> and <i>Chlorophytum</i> are taken orally with water as cooling agent and tonic.¹⁹ ➤ Dry fruits grinded and mixed with sugar to make laddu which is taken 2-3 times in a day for increasing the vigor in men.²⁰ ➤ In UP, India - 3 fruits powder with 25mg of juice of <i>Acacia nilotica</i> and with sugar two times in a day for a week in veneral diseases e.g., gonorrhoea²¹ ➤ In Ranchi, India – Applying paste of fruits locally 3-4 times in a day in skin diseases till cure of disease.²² ➤ Powder of fruits is mixed with sugar and given orally to the diabetic patients to cure diabetes.²³
Leaf	<ul style="list-style-type: none"> ➤ Leaves soaked in water for 12 hours then crushed with sugar candy and cardamom is used to cure leucorrhoea in women.²⁴ ➤ Eight to ten fresh leaves of <i>P. murex</i> rotated in half litre water and half cup of this water taken once a day for 7 days can treat gonorrhoea. ➤ A leaf powder applied locally with butter are used for rheumatic pains.²⁵ ➤ Leaf decoction is used to treat diabetes.²⁶ ➤ Leaves are used to treat ulcers, dysuria, Bone fracture, diarrhoea and in splenic enlargement.²⁷ ➤ <i>Kshirapaka</i> of leaves with young shoots used in seminal debility.²⁸ ➤ Leaf paste applied on swelling to reduce itching.²⁹
Root	<ul style="list-style-type: none"> ➤ The powder of roots is taken with water as tonic for 7-8 days to calm body heat.³⁰ ➤ Pellets prepared from root paste and given daily with boiled cow milk used for virility or vigour in men.³¹ ➤ The decoction of the root is anti-bilious, where juice is used in aphthae as a local application.³²
Seed	<ul style="list-style-type: none"> ➤ A laddus prepared from the seeds of <i>P. murex</i> are given in conditions of joint pain & lumbago and also given for keeping health.³³ ➤ The seeds are crushed with the root of <i>Chlorophytum tuberosum</i> and are given to female suffering from leucorrhoea.³⁴

Table no. 2: References of Bruhata Gokshura used as ethnomedicine

DISCUSSION:

Through this present review study information regarding wide range of therapeutic application of Bruhata Gokshura such as in Urinary disturbance (*Mutrakrichha*), Ashmari, *Vandhyatva* (*Stri/Purusha*), *Shukrala*, *Kasa*, *Shwasa*, *Udara*, *Atisara*, *Pravahika*, *Shwetapradara*, Diabetes, veneral diseases like Gonorrhoea, etc.

has been compiled. Various therapeutic indication of different parts of Bruhata Gokshura along with its way of administration is mentioned. For example, whole plant is used in urinary troubles, urinary calculi, stomachache, diarrhoea, dysentery, intestinal infections, male/female infertility etc. Fruits are used in Fertility disorder, urinary disorders, cooling agent and tonic, gonorrhea, diabetes etc. Leaf is used in leucorrhea, gonorrhea, rheumatic pains, diabetes, bone fracture etc. Root is used to calm body heat, vigor in man's etc. Seeds are used in joints and lumbar pain, leucorrhea etc. *Bruhata Gokshura* is used in different parts of India and other countries. But it has remained clinically very less explored.

CONCLUSION:

This article contains ethnomedicinal information about *Bruhata Gokshura*, its beneficial components, administration, and the region or country where it is used. This information can be useful for further analytical, experimental and clinical studies and the production of this information can be documented for future reference. Based on this current review study, it can be concluded that more such drugs used by tribal groups can be studied and can prove beneficial to other people if scientifically proven.

ACKNOWLEDGEMENT:

The authors are thankful to Department of AYUSH and principal of Government Ayurved College, Vadodara for their support to research work.

REFERENCE:

1. Shashi SS. Encyclopaedia of Indian tribes. New Delhi: Anmol Publications Pvt. Ltd; 1994. pp. 16–27.
2. Pushpangadan P, Atal CK. Ethno-medico-botanical investigations in Kerala I. Some primitive tribes of western ghats and their herbal medicines. J Ethnopharmacology. 1984; 11: 59–77.
3. Fransworth NR. Ethnopharmacology and drug development. Cipa Found Symp. 1994; 185:42–51.
4. Upadhye A, Kumbhojkar MS, Vartak VD. Observations in wild plants used in folk medicine in the rural areas of the Kolhapur district. Anc Sci Life. 1986; 6:119–121.
5. Agnivesha, Charaka Samhita, revised by Charaka and Dridhabala with introduction by Vaidhya-Samrata Sri Satya Narayana Shastri with elaborated Vidyotini Hindi Commentary by Pt. Kashinatha Shastri and Dr. Gorakha Natha Chaturvedi, Sutrasthana, Chapter 1, Verse 121, Varansi: Chaukhamba Bharti Academy; 2016, pg. no. 47.
6. Available from: <https://www.who.int/news-room/25-03-2022-who-establishes-the-global-centre-for-traditional-medicine-in-india> (Last accessed on 28/9/2023)
7. P.C. Trivedi, Ethnomedicinal Plants of India, Aavishkar Publishers, Distributors, Jaipur, 2009, p. 362.
8. P.C. Trivedi, Indigenous ethnomedicinal plants, Aavishkar Publishers, Distributors, Jaipur, 2009, p. 138,210.
9. Shekhawat D, Batra A. Household remedies of keshavraipatan tehsil in bundi disteict, Rajasthan. Indian J Tradit Knowl 2006; x5(3):362-367.
10. Vedavathy S, Mrudula V, Sudhakar A. Tribal medicine of Chittoor District, A.P., Tirupati. Tirupati: Herbal Folklore Research Center;1997.
11. Vibhuti, Dhiman AK, Tripathi A. Herbaceous remedial plants of district Haridwar, Uttarakhand, (India). Adv Plant Sci 2009; 22(2): 589-594.

12. Upadhyay B, Singh KP, Kumar A. Ethno-veterinary uses and informant's consensus factor of medicinal plants of Sariska region, Rajasthan, India. *J Ethnopharmacol* 2011; 133(1): 14-25
13. Upadhyay B, Parveen, Dhaker AK, Kumar A. Ethnomedicinal and ethnopharmacological studies of Eastern Rajasthan, India. *J Ethnopharmacol* 2010; 129(1): 64-86.
14. Mohammed S, Kasera PK, Shukla JK. Unexploited plants of potential medicinal value from the Indian Thar desert. *Nat Prod Rad* 2004; 3(2): 69-74.
15. Mohammed S, Kasera PK, Shukla JK. Unexploited plants of potential medicinal value from the Indian Thar desert. *Nat Prod Rad* 2004; 3(2): 69-74.
16. Kumar M, Semwal IM, Singh JB, Kanchan. Ethno-medicinal recipes for Leucorrhoea by Nomadic people of Etawah, UP. *Vegetos* 2008; 2(2): 35-38.
17. Sampat Nehra, *Herbal Folk Medicine*, Pointer publisher Jaipur,2014, Folklore treatment of Gynacological Disorder, P.no.31
18. Prof.P.C. Trivedi, *Ethnomedicinal uses of Plants*, Pointer publisher Jaipur,2015, P.no.63
19. Upadhyay B, Parveen, Dhaker AK, Kumar A. Ethnomedicinal and ethnopharmacological studies of Eastern Rajasthan, India. *J Ethnopharmacol* 2010; 129(1): 64-86.
20. Singh L, Soni P, Vasistha HB, Kamboj SK. Rare and threatened species of medicinal value under *Prosopis juliflora* (Swartz) DC. in District Tuticorin, Tamil Nadu (India). *New York Sci J* 2010; 3(10):27-36
21. Dr. M.P. Singh, *Wild Medicinal Plants*, Daya Publishing House, Delhi,2011, P.no.217
22. Dr. M.P. Singh, *Wild Medicinal Plants*, Daya Publishing House, Delhi,2011, P.no.217
23. Prof.P.C. Trivedi, *Ethnomedicinal uses of Plants*, Pointer publisher Jaipur,2015, P.no.63
24. Upadhyay B, Parveen, Dhaker AK, Kumar A. Ethnomedicinal and ethnopharmacological studies of Eastern Rajasthan, India. *J Ethnopharmacol* 2010; 129(1): 64-86.
25. Katewa SS, Chaudhary BL, Jain A. Folk herbal medicines from tribal area of Rajasthan, India. *J Ethnopharmacol* 2004; 92(1):41-46.
26. Balakrishnan V, Prema P, Ravindran KC, Robinson JP. Ethnobotanical Studies among Villagers from Dharapuram Taluk, Tamil Nadu, India. *Global J Pharmacol* 2009; 3(1): 8-14.
27. Jain A, Katewa SS, Chaudhary BL, Galav P. Folk herbal medicines used in birth control and sexual diseases by tribals of southern Rajasthan, India. *J Ethnopharmacol* 2004; 90(1): 171-177.
28. Dr. M.P. Singh, *Wild Medicinal Plants*, Daya Publishing House, Delhi,2011, P.no.217
29. Prof.P.C. Trivedi, *Indigenous Ethnomedicinal Plants*, Pointer publisher Jaipur,2009, P.no.139
30. Upadhyay B, Parveen, Dhaker AK, Kumar A. Ethnomedicinal and ethnopharmacological studies of Eastern Rajasthan, India. *J Ethnopharmacol* 2010; 129(1): 64-86.
31. Balakrishnan V, Prema P, Ravindran KC, Robinson JP. Ethnobotanical Studies among Villagers from Dharapuram Taluk, Tamil Nadu, India. *Global J Pharmacol* 2009; 3(1): 8-14.
32. Dipali D, Das MN. Pharmacognostical studies of root and fruit of Gokshura (*Pedalium murex* Linn.). *BMEBR* 1995; 16(1-2):54-65.
33. Katewa SS, Galav PK. Traditional herbal medicines from Shekhawat region of Rajasthan. *Indian J Tradit Knowl* 2005; 4(3): 237-245.
34. Upadhyay B, Parveen, Dhaker AK, Kumar A. Ethnomedicinal and ethnopharmacological studies of Eastern Rajasthan, India. *J Ethnopharmacol* 2010; 129(1): 64-86.